

UTAH DEPARTMENT OF TRANSPORTATION

TRAFFIC OPERATIONS CENTER

MONTHLY REPORT **AUGUST 2003**

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 Phone: 887-3700 Fax: 887-3797 commuterlink.utah.gov



Field Devices Summary

Freeway Closed Circuit Television (CCTV)	163
Surface Street CCTV	32
Dial-up CCTV	35
Total CCTV	230
Freeway VMS	42
Surface Street VMS	17
Portable VMS	2
Total VMS	62
HAR (6 deployed, 5 portable units)	11
TMS	231
RWIS	41
Connected Traffic Signals	623
Connected Ramp Meters	23

Operations Summary

VMS Messages Displayed	303
Signal Timing Calls	27
Signal Maintenance Calls	245
New Work Orders	347
Incident Responses	258
Website Visitor Sessions	56,676
511 Calls	15,060
Email Alerts Sent	389
CommuterLink Questions	4

TOC Employee of the Month



Karen Wilding – TOC Operator



Overlay and Expansion Project in Region 3

KUDOS!

“I want to pass along to you my observation concerning the great work Mack Christensen and his people are doing with respect to traffic management at special events... As I left the parking lot, I was able to see the benefits of their efforts... Not many attendees at special events recognize what these efforts are doing for them, but they would notice quickly if the service wasn't there.”

—David Miles

TOC Mission

1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
2. To Help Provide Reliable and Efficient Travel.
3. To Provide Useful and Timely Real-time Traffic Information.
4. To Work Together with Other Government Agencies to Serve the Public.
5. To Provide Excellent Customer Service.

ACTIVITY HIGHLIGHTS

TOC Activities

This Month

1. This past summer the TOC had the opportunity to work with two UDOT interns, Barry Bunderson and Michael Heaps. Barry worked with Joe McBride and was tasked primarily with marking all overhead lighting and locating their geographic coordinates. Barry used a hand-held GPS device to record the position of each light pole and entered the data in GIS to create system maps. Barry is entering his junior year at Utah State University in Civil Engineering. Michael worked with Scott Jones, and was able to extend his knowledge of traffic engineering and procedures. Most of his work was focused on issues related to the USANA Amphitheater. Michael is entering his senior year at the University of Utah, and plans to graduate in the spring.
2. Jeff Woodbury brought all of the Airwatch Traffic reporters through the TOC on the 21st and 22nd of August. These reporters receive traffic information from the Airwatch Traffic Producer at the TOC (Paul Nelson). This information is put on a web page, and is made available to the various reporters, from which they broadcast traffic information. This tour provided many of the reporters the opportunity to see where all their traffic information originates. Airwatch provides traffic reports to 14 radio stations and one television station, through which they reach a large percentage of the traveling public.
3. Dave Kinnecom, Joe McBride, Mark Parry, and Blake Hansen attended the Institute of Transportation Engineers (ITE) Annual Meeting and Exhibit in Seattle, Washington from August 24th to the 27th. During the meeting, they exchanged information with professionals around the country about how to improve traffic operations. During the conference, Joe McBride was able to tour the Washington State Department of Transportation Traffic Systems Management Center. Dave Kinnecom and Blake Hansen met with the Traffic Management Centers Committee, and presented information on ATMS maintenance and management.
4. Kevin Stansfield left Airwatch Traffic to pursue a career as the host of a radio talk show. Kevin has been working at the TOC since the TOC came online in 1999. Kevin has helped the TOC broadcast accurate and up to date traffic information to commuters everyday.
5. On August 8th, Bryan Chamberlain led a tour of the TOC for the National 511 Working Group. This group provides guidelines for 511 content, unified marketing, and efforts to be consistent throughout states. Utah is one of 18 states that has a 511 system.
6. Mark Parry and Mark Taylor gave a presentation to all Region Traffic Engineers and representatives from Traffic and Safety on August 11th. This presentation focused on revisions to traffic signal detector placement designs.

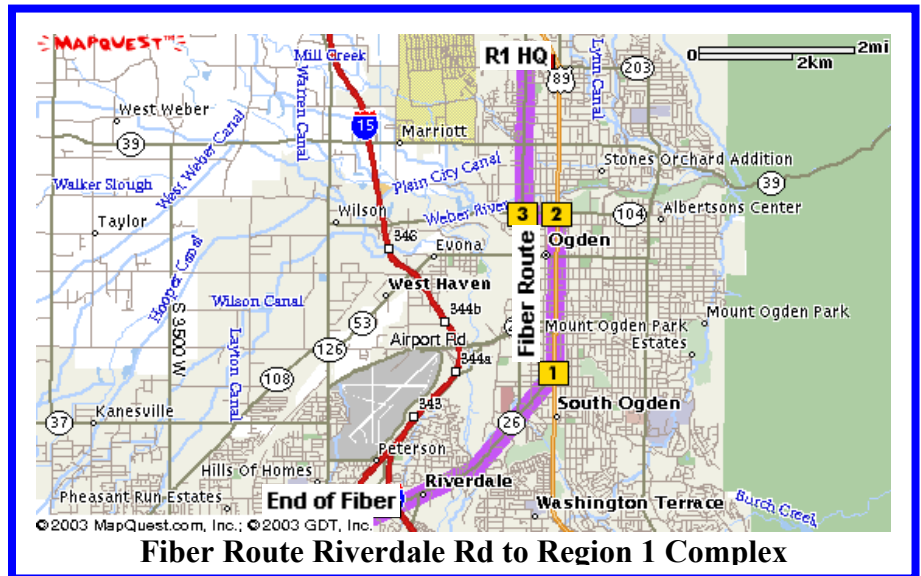


ATMS Improvement and Expansion Activities

The following is a list of many of the projects that have either been completed, or are currently underway:

Region 1:

- Another segment of the Region 1 Interconnect was completed in the month of August. This segment completed fiber installation from the Region 1 Complex to Riverdale Road (shown in purple in figure to right, courtesy of Mapquest.com). When all segments are complete, UDOT will have continuous fiber from the Region 1 Complex to the TOC.
- A new traffic signal installation at US-89 and Shepard Lane in Farmington is nearly complete. The intersection is planned to be online in early September. It is located on the new frontage road of US-89, and will be used when US-89 is closed for the construction of a new bridge structure. Several enhancements are being made in the Farmington area as conduit is being installed to carry communications to the VMS on US-89 near Nicholls Road.
- The temporary Burke Lane traffic signal on US-89 was removed as the new Burke Lane structure was opened to traffic.



Region 2:

- Design work continues on the ATMS project to add devices between the Point of the Mountain and 10600 South.

Region 3:

- The Utah County ATMS Expansion Project has been completed. This project includes the linking of Region 3 to Region 2 via a wireless connection from 800 North to the Point of the Mountain. 12 CCTV and 6 TMS were installed.
- An overlay and expansion project has begun on I-15 from the Salt Lake/Utah county line to the north Lehi Interchange. Two CCTV/TMS sites, one RWIS and one VMS are being included as part of this construction project.



Region 4:

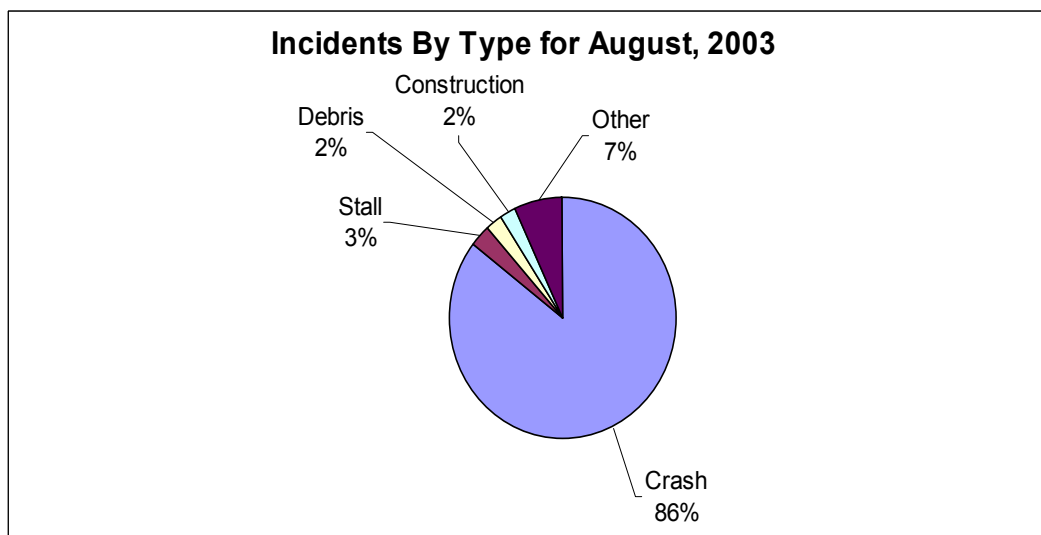
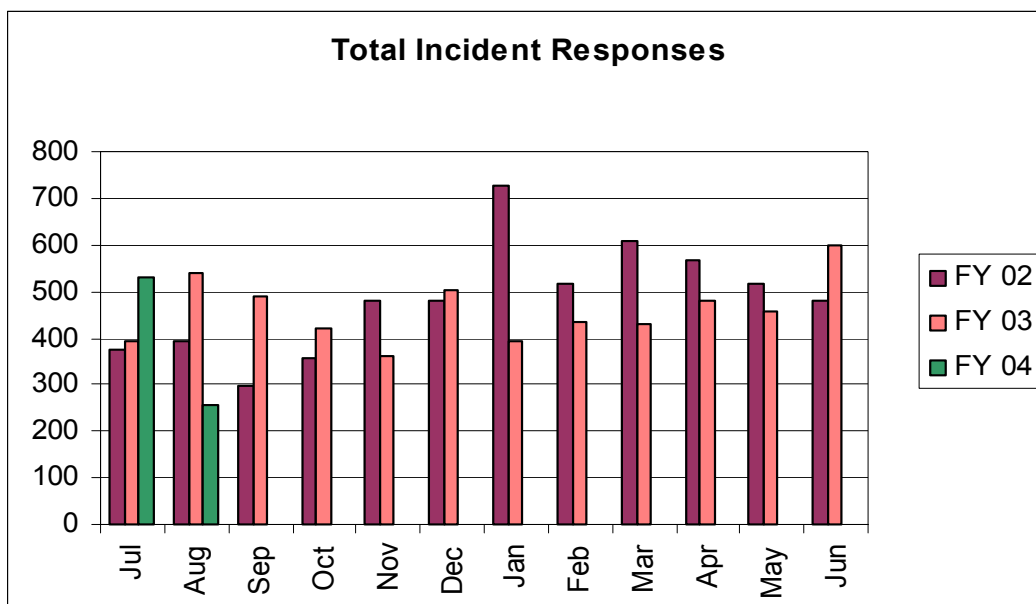
- A new RWIS is being installed in Monticello along SR-191. This RWIS will extend the ability to aid UDOT crews by providing real time atmospheric and road surface conditions in this Southeast Region of the State.

Acronyms

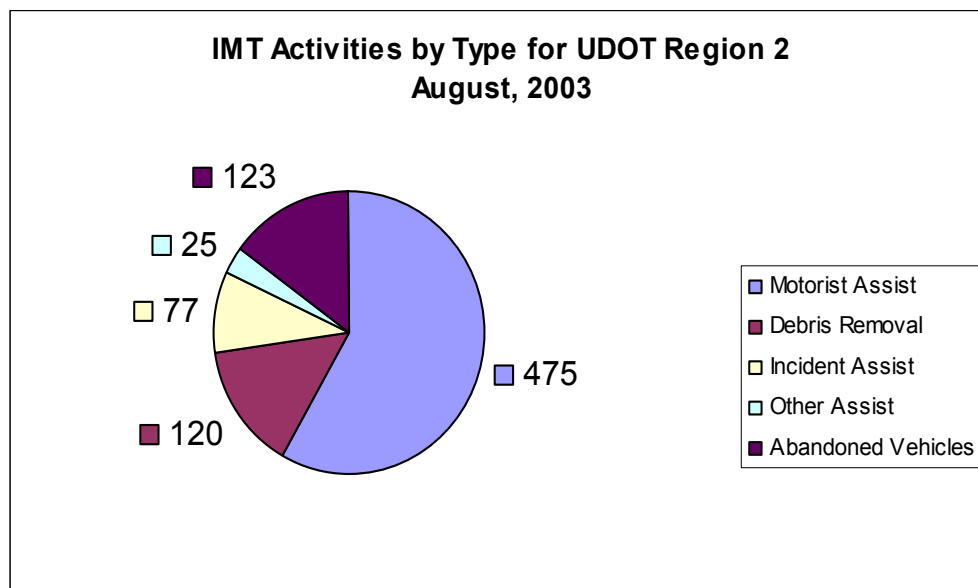
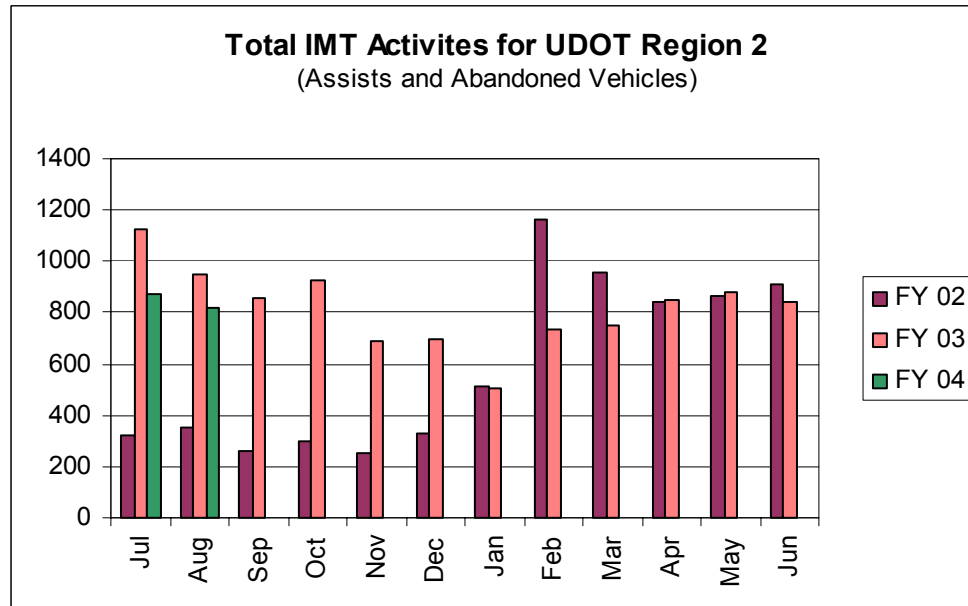
ATMS	Advanced Traffic Management System	TMS	Traffic Monitoring Station (count station)
CCTV	Closed Circuit Television	TOC	Traffic Operations Center
DPS	Department of Public Safety	TTI	Travel Time Index
HAR	Highway Advisory Radio	VMS	Variable Message Sign
RWIS	Road-Weather Information System		

Safety

An incident response is an incident recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Each time an incident is created information is sent to the 511 system, the website, and email alerts are generated. The number of incidents for the month of August is low due to the system being offline for several days.



Region 2 Incident Management Team (IMT) Activities



Freeway Traffic Level of Service

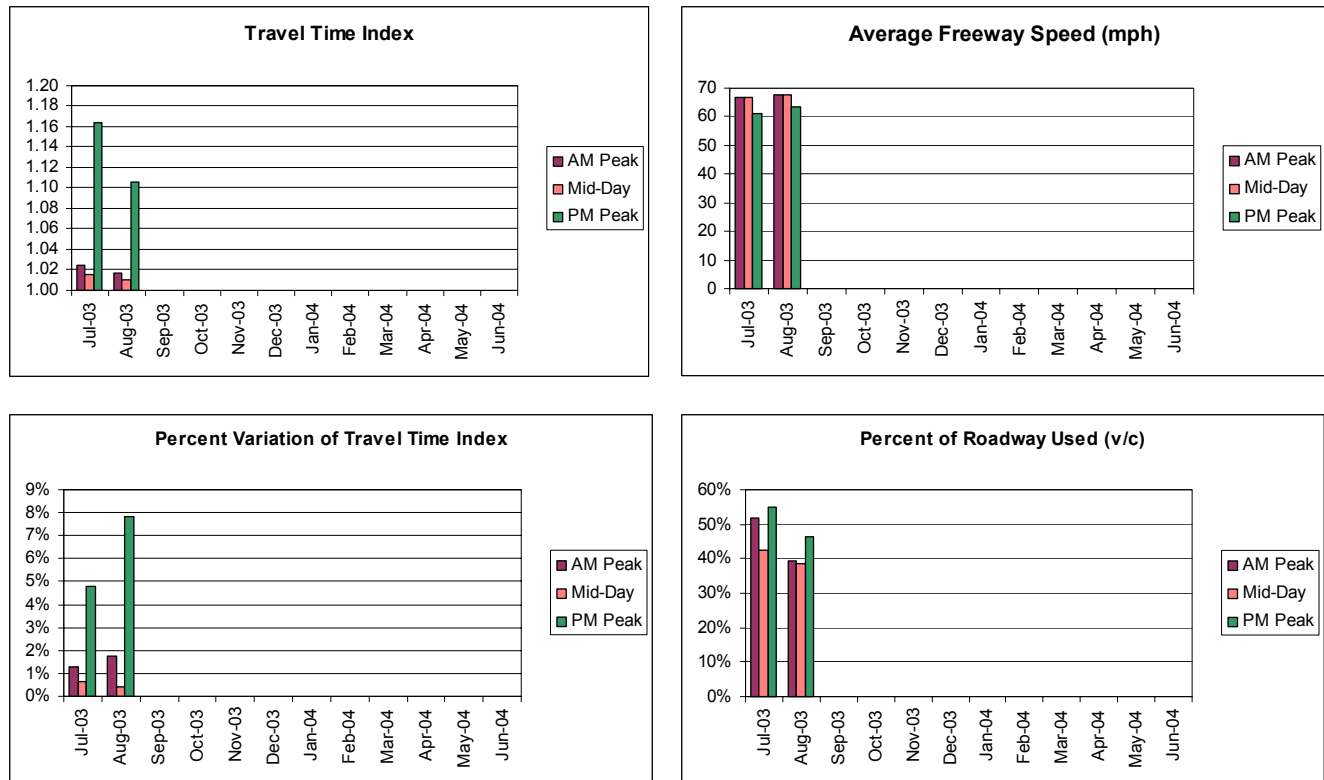
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

Travel Time Index: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of one (1) represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time index changes from day-to-day.

Average Freeway Speed: The Freeway Speed is weighted by volume.

Percent of Roadway Used: The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).



The 5 links with the highest average Travel Time Index for the month are:

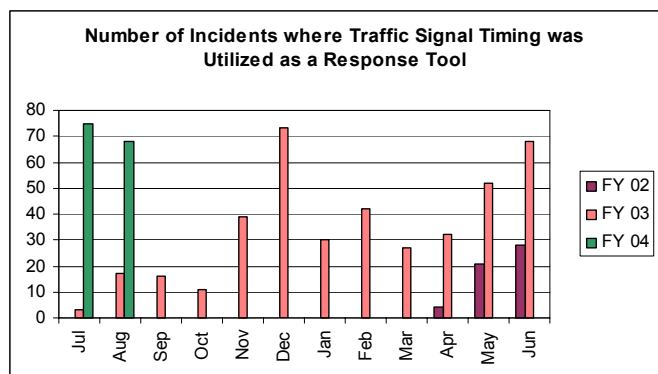
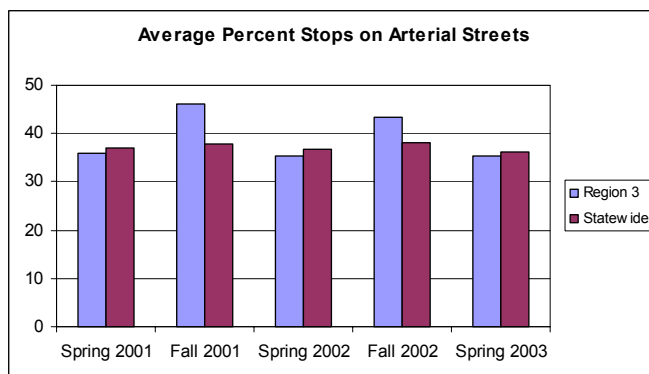
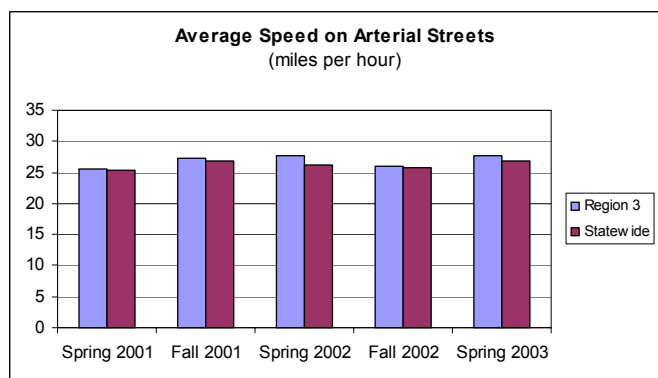
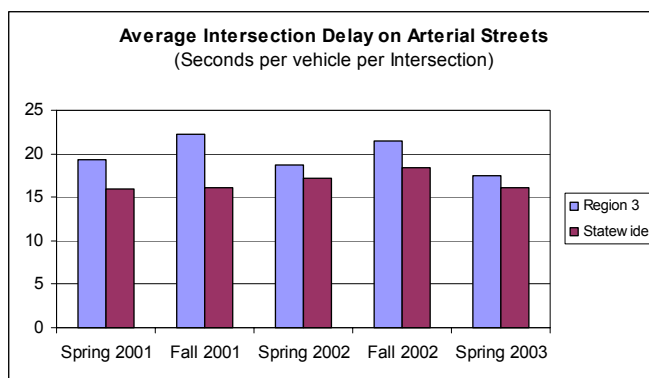
Segment	Period	Avg Of TTI
I-15 NB from 600 N to I-215 W	PM Peak	2.01
I-15 NB from 600 S to 600 N	PM Peak	1.48
I-15 SB from 10600 S to Point-of-the-Mountain	PM Peak	1.28
I-15 SB from 4500 S to I-215 S	PM Peak	1.23
SR-201 WB from I-15 to I-215 W	PM Peak	1.15

(Note: TTI values may be high due to the limited sample size as a result of the system being down)

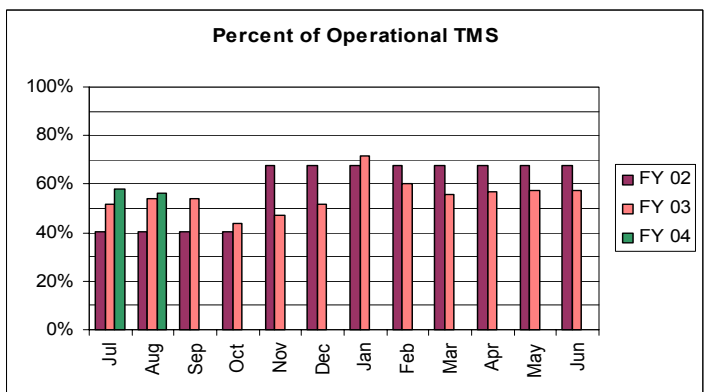
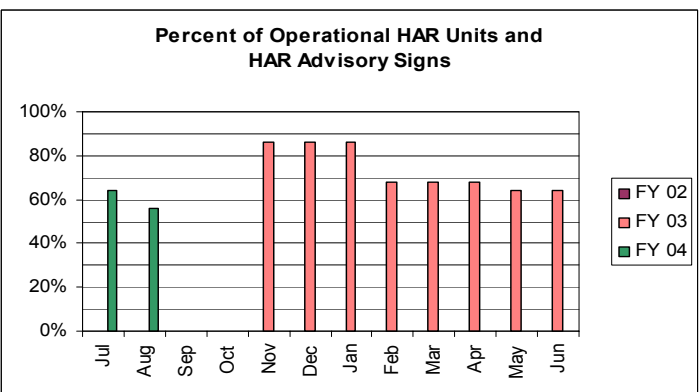
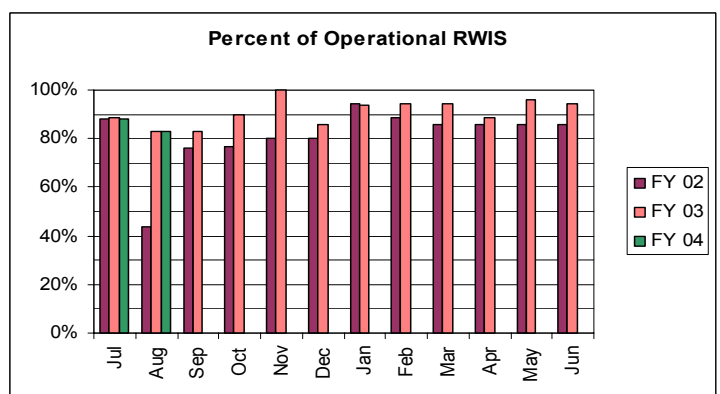
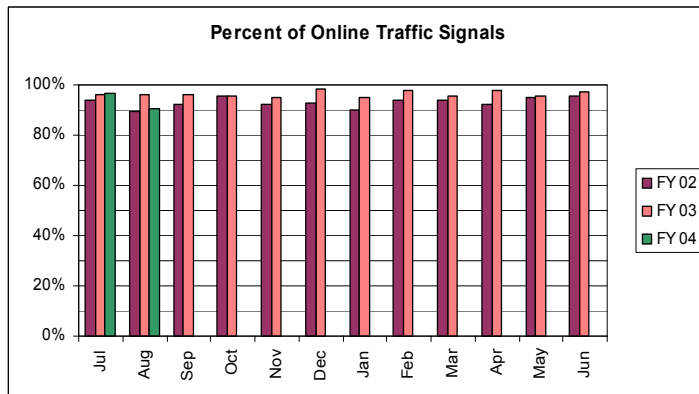
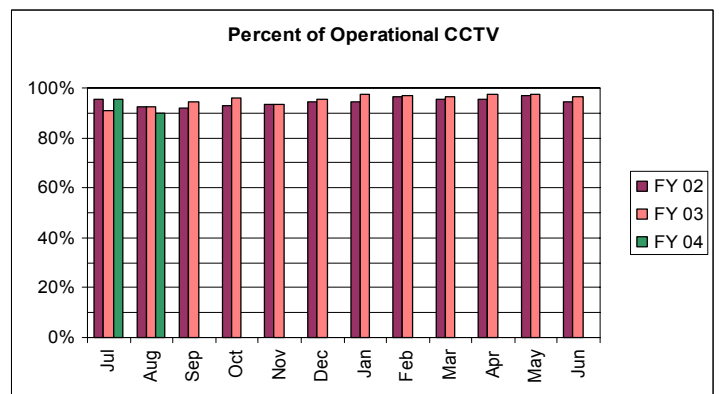
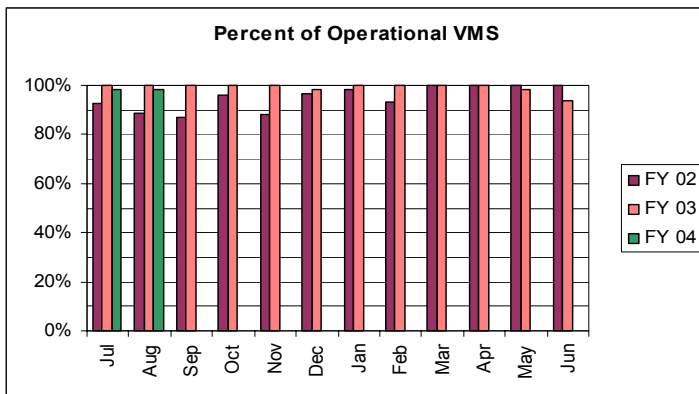
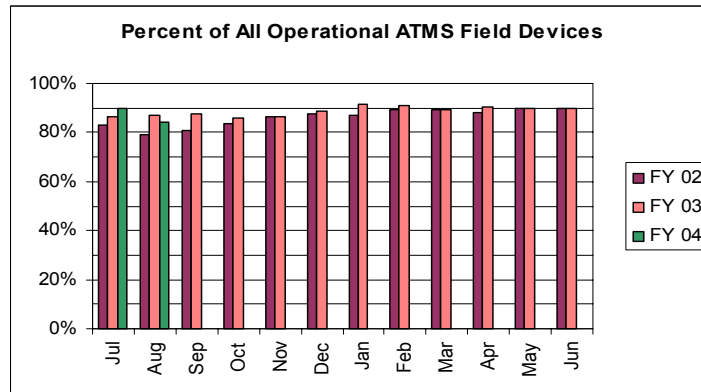
Surface Street Traffic Level of Service

The surface street traffic statistics are generated through a series of Travel Time measurements. Much can be learned through several runs along a corridor, including the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Statewide Timing group gathers these measurements from Regions 1-4 twice each year. The chart in the lower right corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help relieve excessive congestion.

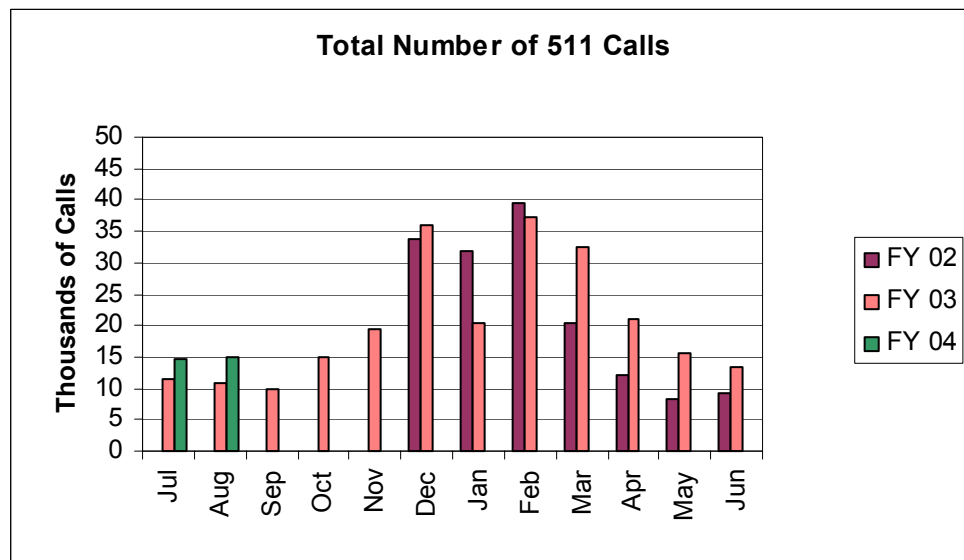
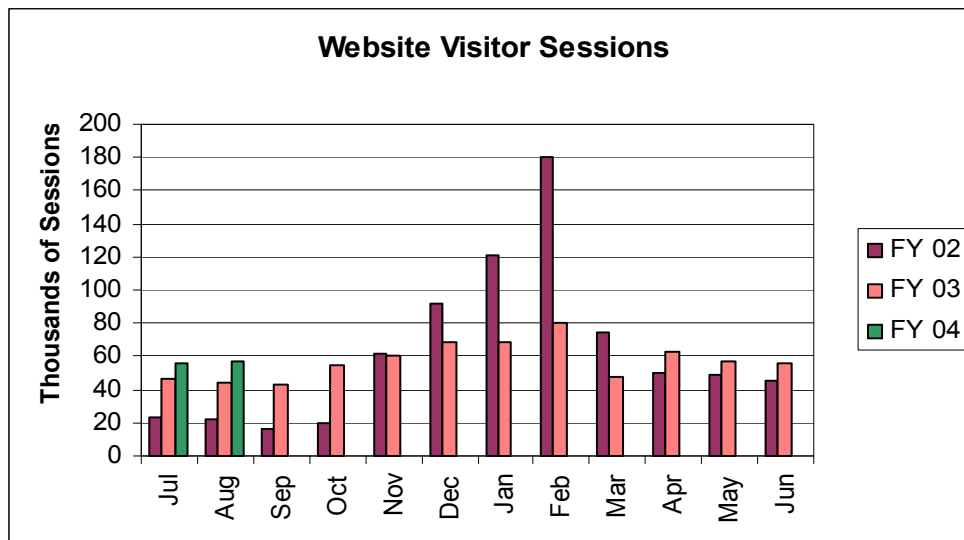
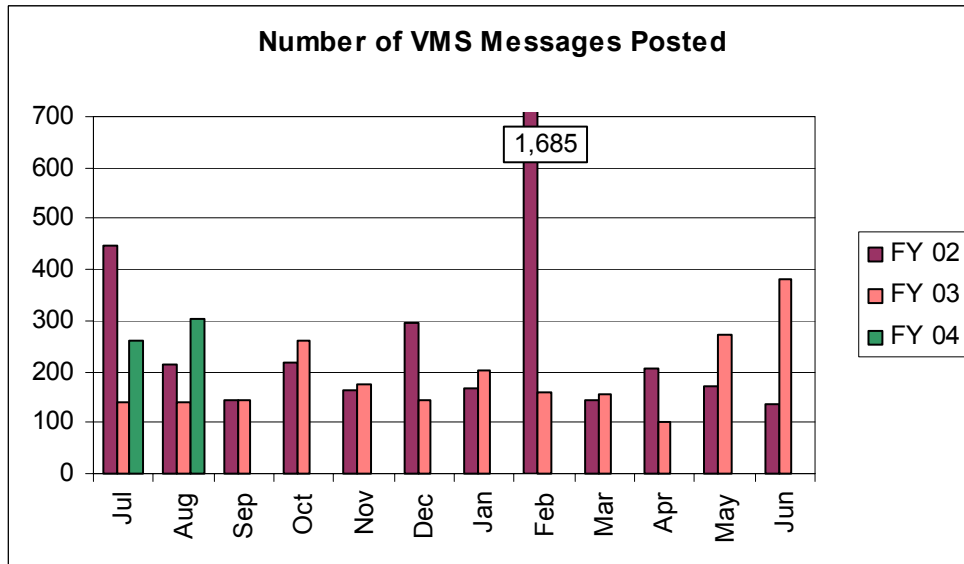
Since the data is gathered semi-annually, each month this report will provide charts for a region compared to the statewide average. The charts below represent Region 3 compared to the Statewide Average.



Maintenance

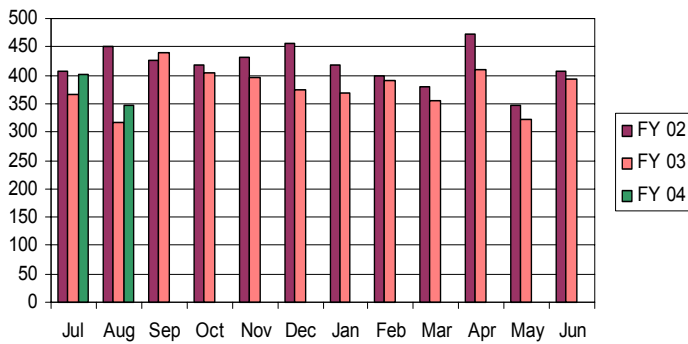


Traveler Information

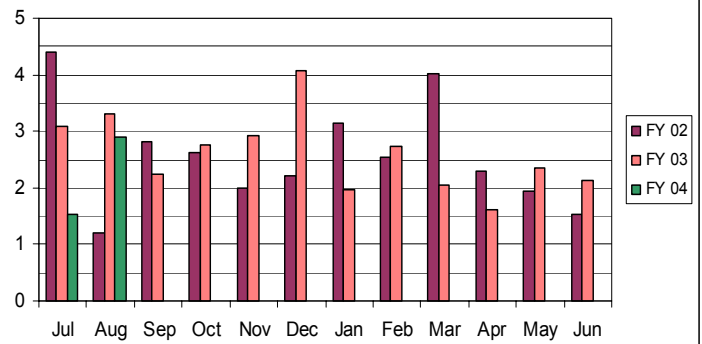


Customer Service

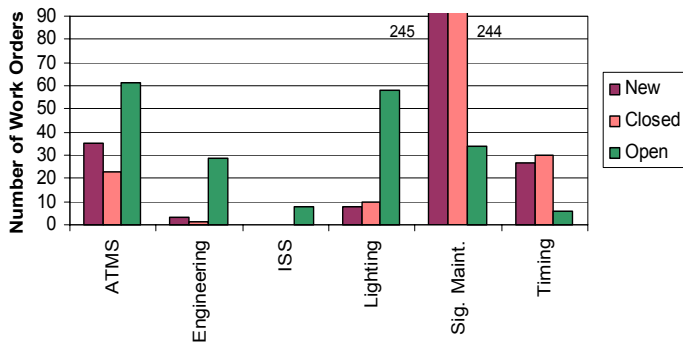
Number of New Work Orders



Overall Average Work Order Turnaround Days



Work Order Status by Group for August 2003



Work Order Status for All Groups for FY04

